



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,299	07/28/2003	Reiyao Zhu	HT3920 US NA	6457

23906 7590 02/03/2006

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,299

Applicant(s)

ZHU, REIYAO

Examiner

Jenna-Leigh Befumo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 19 are pending.

Double Patenting

2. Claims 1 – 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 - 20 of copending Application No. 10/630,102 in view of Edwards (GB 2152542 A). The applicant argues that it would not be obvious to substitute FR viscose fiber for the claimed FR modacrylic fibers. However, Edwards discloses that a fire resistant fiber blend can be made from a blend of various fire resistant fibers including modacrylic and FR viscose depending on the desired properties of the finished product. Therefore, one of ordinary skill would be able to appreciate the properties provided each individual fiber and that the various fire retardant fibers can be substituted for one another in the fiber blend depending on the properties desired in the final product. The applicant has not provided sufficient evidence to the contrary. Thus, the rejection is maintained. Further, the applicant states that the rejection is predicated on modifying the disclosure of 10/630,102 by Edwards instead of Edwards in view of 10/630,102 (response, page 4). However, the rejection is set up properly, it should be the other Application which is modified by a secondary reference to show that the modification would be obvious to the Application.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1 – 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ichibori et al. (5,503,916) in view of Edwards (GB 2 152 542 A) for the reasons of record.

Art Unit: 1771

5. Claims 1 –19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards in view of Ichibori et al. for the reasons of record.

6. Claims 1 – 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ichibori et al. in view of Campbell et al. (6,787,228 B2) for the reasons of record.

Response to Arguments

7. Applicant's arguments filed November 22, 2005 have been fully considered but they are not persuasive. The applicant argues that the rejection based on Ichibori et al. in view of Edwards produces a fiber blend totally different from the claimed invention and oversimplifies the prior art references and the present application (response, pages 7 and 8). However, the applicant fails to provide detailed reasons as to why the combination would not produce the claimed invention and how the prior art and the present application were misinterpreted. In response, it is noted again, that Ichibori et al. is drawn to producing a fiber blend comprising a fire resistant fiber (which the examples specifically teach is a modacrylic fiber) and second fiber chosen to modify the physical properties of the fabric made from said fiber blend (column 1, lines 15 – 62). Specifically, the second fiber is added to modify properties such as visual feeling, feeling of touchness, hygroscopic properties, washing resistance, durability, and the like (column 4, lines 13 – 65). In other words, the goal of Ichibori et al. is to produce a fire resistant material which has desired aesthetic properties making it more comfortable during use.

And with regards to the applicants argument that the list of fibers which can be blended with fiber (A) is a broad, extensive list requiring one to pick and choose to produce the claimed invention, it is noted that the list includes six different types of synthetic fibers, one of which is nylon. Further, one of ordinary skill in the art would readily appreciate the properties and

Art Unit: 1771

advantages of the different types of fibers listed by Ichibori et al. The extensive picking and choosing is actually between a limited grouping of different types of fibers which have known properties and thus, will produce predictable results without requiring extensive testing.

Edwards was included in the rejection to teach the advantage of using a blend of modacrylic fibers and aramid fibers as the fire resistant fibers, instead of just modacrylic fibers, as disclosed by Ichibori et al. The applicant only argues that Edwards has been inaccurately represented by the Office. But again, the applicant fails to provide specific reasons why the reference was misrepresented. And the arguments conclude with the reasoning that one of ordinary skill would not produce the claimed invention based on these two references. However, without specific reasons as to how the rejection as a whole, and not just the individual references is insufficient the applicant has not provided persuasive arguments to overcome the rejection. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Further, the applicant has provided no evidence of unexpected results due to combining the fibers to produce the claimed invention. Thus, the rejection is maintained.

8. The applicant argues that the rejection based on Edwards in view of Ichibori et al. is not sufficient because Edwards requires a blend of three of four fire resistant fibers including modacrylic and aramid fibers (response, page 9). However, it is unclear why this feature would exclude the claimed invention or make the rejection based on Edwards and Ichibori et al. unreasonable. There is nothing in the claim which excludes a blend having a total of four fibers.

Art Unit: 1771

Nor does Edward exclude adding a fourth fiber to the blend to help modify the aesthetic properties of the fabric. Thus, the combination of references would produce a blend with 3 fire resistant fibers and a nylon fiber. Therefore, the rejection is maintained.

9. With regards to the rejection based on Ichibori et al. in view of Campbell et al., the applicant argues the rejection by stating that Campbell et al. is insufficient to cure the deficiencies in Ichibori et al. (response, page 9). However, the applicant has failed to point out the specific deficiencies in the rejection based on the combination of Ichibori et al. and Campbell et al. The applicant has addressed the references individually without clear detail as to what is lacking in the combination. As set forth above it is felt the Ichibori et al. provides teaching of blending modacrylic fibers with a second fiber such as nylon fibers and Campbell et al. discloses why adding a small amount of aramid fibers to the fiber blend would produce improved properties in the fiber blend. Thus, the rejection is considered to have addressed all the claimed limitations, and is maintained.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

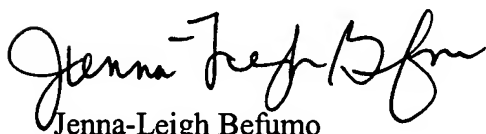
Art Unit: 1771

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Jenna Leigh Befumo', written in a cursive style.

Jenna-Leigh Befumo
January 31, 2006